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ABSTRACT

The purpose of this study was to evaluate the performance of high school counselors and college and university representatives as perceived by college freshmen. A further purpose was to determine if significant differences existed in the perception of student articulation problems by high school counselors, junior college admission officers, college and university admission officers, and college freshmen. Data gathered from 994 students at various Texas colleges, universities, and junior colleges showed that high school counselors are often unavailable to advise students, but that most students benefitted from what assistance they did receive. Many students reported nonbeneficial experiences with college representatives in the areas of "preparation to enter college" and "selection of college courses," but most students reported beneficial contact in all other areas. Perceptions of the relative importance of ten student articulation problems by college freshmen differed significantly from high school counselors' perceptions on six of ten items and from the perceptions of junior college and college admission officers on two of the ten items. There were no significant differences between the perceptions of high school counselors, junior college admission officers, and college and university admission officers. (Author/JG)

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# STUDENT ARTICULATION BETWEEN SELECTED PUBLIC HIGH SCHOOLS AND THE PUBLIC COLLEGES AND UNIVERSITIES IN TEXAS

by

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March, 1974

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TABLE OF CONTENTS


| Chapter | | Page |
|---|---|---|
| I | INTRODUCTION | 1 |
| | STATEMENT OF THE PROBLEM | 2 |
| | ASSUMPTIONS | 2 |
| | LIMITATIONS OF THE STUDY | 2 |
| | SIGNIFICANCE OF THE STUDY | 3 |
| II | REVIEW OF THE LITERATURE | 4 |
| | ARTICULATION STUDIES RELATED TO PREPARATION FOR AND ADMISSION TO COLLEGE | 4 |
| | ARTICULATION STUDIES RELATED TO GUIDANCE AND COUNSELING | 8 |
| | GENERAL ARTICULATION STUDIES | 11 |
| III | COLLECTION AND PRESENTATION OF DATA | 16 |
| | PHASE I | 16 |
| | PHASE II | 25 |
| IV | SUMMARY, CONCLUSIONS AND RECOMMENDATIONS | 53 |
| | SUMMARY | 53 |
| | CONCLUSIONS | 58 |
| | RECOMMENDATIONS | 62 |
| | RECOMMENDATIONS FOR FURTHER STUDY | 65 |
| BIBLIOGRAPHY | | 66 |


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# CHAPTER I

## INTRODUCTION

Throughout the past century, educators have continually been perplexed with the transition of students from one level of education to another. As these levels of education were created to meet new demands, their functions and relationships to other levels became obscure. This need for better articulation between these units of education became an immediate problem.

In 1959, a conference on high school-college relationships was held in Texas. From that conference, Marcom stated in his address to the participants, ". . . it is realized that good relations between high school and colleges are essential to the proper discharge of the duties imposed upon all of us by our society." During that same conference, Boze related:

> Secondary schools and colleges need to become better acquainted. It has been noted that throughout the nation, as is the case in Texas, the principals have their meetings, the college deans have their meetings, college admission officers and registrars have their meetings, and high school counselors have their meetings, but very seldom do we have the opportunity of getting together to discuss mutual problems.
>
> Only by a better understanding of each other can colleges and secondary schools hope to avoid gaps in the total educational program.

## STATEMENT OF THE PROBLEM

The purpose of this study was to determine beneficial and non-beneficial performance of public high school counselors and public college and university representatives as perceived by selected college and university freshman students. A further purpose was to determine if significant differences exist among the mean scores of selected public college and university freshman students, selected public high school counselors, public junior college admission officers, and public senior college and university admission officers on a questionnaire measuring their perception of the student articulation problems identified in this study.

## ASSUMPTIONS

1. The selected population of students and high school counselors would be a representative sample from the total population of both groups.

2. The incidents of performance recorded by the students would be accurate responses.

## LIMITATIONS OF THE STUDY

This study was limited to those state supported colleges and universities in Texas having freshman and sophomore classes. Also, only selected college and university freshman students were invited to respond to the Critical Incident Booklet. Public high schools with an enrollment of less than 115 were excluded from the study.

## SIGNIFICANCE OF THE STUDY

High school counselors and college admission officers seem to be constantly seeking better procedures to improve articulation. An important concern of both groups appears to be the smooth transition of students from high school to the college or university. The results of this study might give added insight into those transition problems. The beneficial and non-beneficial incidents recorded by the students will be useful to high school counselors and college representatives in their evaluation of services performed for students. A comparison of the articulation problems as perceived by the four groups might be significant in helping to develop better communication among the groups.

# CHAPTER II

## REVIEW OF THE LITERATURE

The years immediately following World War II brought about many interesting developments in the transition of students preparing for college. Traxler and Townsend described this period in the following way:

> The influx of veterans following the war had two somewhat opposing influences on admission procedures. On the one hand, the necessity for processing great numbers of applications rapidly tended temporarily to cause admission procedures of some colleges to become somewhat mechanical and arbitrary. There was not time to consider the whole individual and to weigh strengths and limitations judiciously and sympathetically. On the other hand, there was an influence in the direction of more liberal procedures, for many veterans came without the usual college preparatory high school record, and it became approved practice to accept demonstrated evidence of fitness.

### ARTICULATION STUDIES RELATED TO PREPARATION FOR AND ADMISSION TO COLLEGE

The public high schools have the responsibility to develop and administer a program which will provide for the education of all youth, including both those who go on to college and those who do not. One of the functions on the high school is to develop and prepare students for successful work in the colleges and universities. A function of all post-secondary institutions is to prescribe various admission criteria for students.

Pattillo and Stout prepared a report in 1950 that identified the viewpoint of high school authorities concerning their relations with colleges. They summarized their report in the following manner:

1. College admission requirements in their present form are adversely influencing the curricular offerings of secondary schools.
2. Colleges have not adapted their curricula, teaching methods, guidance services, and admission practices to serve the needs of their students and to accord with the findings of modern research in education.
3. Colleges do not provide high schools with adequate information about college programs, admission requirements and procedures, and the level of ability of students in particular higher institutions.
4. The visitations of college representatives and the publications of colleges are often of a purely promotional nature and do not help the student select the college best suited to his individual needs.
5. Parents and college personnel too frequently place sole responsibility on the high school for the failure of students in college.
6. Colleges make heavy demands on high school authorities for detailed information about applicants, and much of this information is not specifically needed or properly used for admission purposes.

Shafer, in his 1956 study of the preparation of students for college, concluded that the colleges were not being forced to change admission requirements because of increased curricular offerings in the secondary schools. He also found that differences did exist between small and large high schools in the basic subjects presented for college entrance.

From the results of a meeting held in 1959 of representatives of high schools and colleges in Texas, Fallon related the following suggestions made by the college representatives:

1. More thorough pre-admission testing.
2. Improved and possible uniform transcript reporting.

3. More selective college admission procedures under conditions which hamper colleges from accepting all candidates.
4. Advanced placement of brighter high school graduates.

Prediction of student achievement and success is a major factor in the preparation for and admission to college. Eysenck estimated in 1947 that over a thousand prediction studies had been published. Studies of prediction began in the early 1900's and since that time colleges and universities have continually looked for new methods and procedures for predicting the success of future college students (Williams:6).

Diamond noted that at least two test publishers offered college prediction services. The College Entrance Examination Board provides a workbook for college admissions officers that presents a method for statistically forecasting college or university academic performance. The American College Testing Program sends a grade prediction profile to selected colleges to which the student is applying. These grade predictions include the academic areas of English, mathematics, social studies, and natural sciences, as well as one overall grade prediction.

Reiss and Fox recognized the importance of predictive criteria for college success by suggesting the use of certain "intangible factors. They concluded that:

> A careful consideration of intangibles--drive, motivation, intellectual curiosity, emotional balance, sense of values, and life goals--is as necessary to a prediction of academic achievement as the measurement of scholastic ability. Failure to recognize their importance may be the reason that some students fall spectacularly outside the predictions made for them. If valid measures of intangibles could be attained, it would aid immensely in efforts to guide young people in their search for fulfillment. Yet while it cannot be said with certainty that one student has all of the desirable traits and

another does not, objective data should be tempered with an understanding of the character and creativity of the individual.

In the preparation of students for entrance into college, Chilton offered the following guidelines for high school personnel:

1. Students, teachers, counselors, and parents need to have realistic goals concerning certain areas of study the student plans to pursue.

2. An orientation or career program that includes various occupational areas is an excellent approach to guiding students into a chosen field.

3. High school personnel should encourage several college campus visitations for students beginning late in their junior year.

4. The formulation of good study habits in grade school and high school should be encouraged.

Speaking to the representatives of the Forty-Fifth Annual Convention of the National Association of Secondary School Principals, Wilson approached the problem of admissions to college in the following manner:

1. Stop talking about good and poor, prestige and non-prestige colleges, and talk instead about educational opportunities in all institutions of higher learning.
2. Stop making first-class citizens out of students with top marks and test scores-stop all talk that suggests that the only gifted and talented youth are those with IQ's.
3. Help all students to realize that their success and happiness depend on only one thing--full development of their individual interests and talents, whether this development takes place in a two- or four-year college, in general education or a training program, or in an occupation that requires work with the mind or work with the hands.

## ARTICULATION STUDIES RELATED TO GUIDANCE AND COUNSELING

One of the most important influences affecting high school-college articulation is the student-counselor interview. It occurs every school day in many thousands of high schools throughout the country. The judgement of professional guidance personnel, both in the high schools and colleges, is very significant in that they share the responsibility of realistically assessing the capabilities of college-bound students.

Thresher emphasized that sharing information concerning student grades, test scores, and personal traits should be a joint responsibility of college representatives and high school guidance counselors. He claimed that the counselor whose ideas and information about colleges had not changed in twenty years was a threat to students seeking admission to college.

Broad pointed out that a concern of the high schools is the lack of guidance and lack of concern that colleges have for the welfare of college freshmen. He stated:

> We must remember that college freshmen are relatively immature people who have been living at home and attending high schools where the teachers have looked after them very carefully. When these immature people find themselves on a college campus in a strange environment they are at a loss about how to get along, to whom to turn, they have a feeling that members of the college staff are complacent or indifferent about their welfare.

Mutual understanding and evaluation of the purposes of the high school and college is necessary. Cook suggested that in order to facilitate transition of students, informed and interested counselors at both the high school and college level were needed.

He said, 'High schools need to be concerned with developing in students more self-dependence, whereas relationships at college must become more personalized.'

Traxler and Townsend expressed the opinion that high schools should provide opportunities for training counselors in the preparation of students for college. They believed:

> ... schools and colleges should cooperate to furnish counselors with a continuous flow of up-to-date information regarding the requirements and opportunities in individual colleges. Frequent opportunity should be allowed counselors for inservice training and summer interim study so that they may keep abreast of progress in techniques of pupil appraisal and in procedures in interpreting guidance information both to parents and to higher institutions. Counselors concerned with guidance of college preparatory pupils should be enabled to make systematic visits to large numbers of colleges so that they may gain firsthand knowledge of facilities and a 'feel' of the atmosphere of the institutions to which they may be directing applicants.

Kerr conducted a study of high school senior perceptions of the nature of the college decision and the school counselor's role in providing assistance in the college decision-making process. He found that the seniors ranked parents first and counselors second in aiding them with college plans. The counselors, however, were seen as being the most accurate source of information about colleges.

Morrison reported on a study of perceptional differences between high school seniors and school counselors concerning college choice. The results indicated a considerable lack of uniformity between the seniors and counselors. Counselors perceived their own advice as well as college night programs as very important influences in the choice of college. Seniors perceived the counselor's advice as not important while college nights, admissions conferences, and correspondence from professors were very important in choosing a college.

In his study of college admission guidance practices, Cooper pointed out that the most effective assistance a guidance counselor could give a student concerning his selection of a college was to:

1. Know the student's interests and abilities.

2. Keep the student and parent informed of various colleges and occupations.

3. Know the character and purpose of the various colleges.

4. Aid in the processing of the student's application to college.

5. Keep professionally alert by maintaining membership in guidance associations.

6. Conduct follow-up and evaluation studies of former students.

Diamond recognized the need for high school and college guidance personnel to examine their programs and jointly decide the most effective means for student success in college. In making this change from high school to college life, students need help from both institutions. Orientation programs for college-bound youth should be worked out by a cooperative effort of colleges and high schools.

Reiss and Fox pointed out that there was little in the professional literature that gives a complete picture of the responsibilities and functions of a successful college guidance program. Guidance programs for the future college students are being initiated, expanded, and improved throughout the country. It was also the authors' viewpoint:

> ... if there is only one student who has potential for college in any one secondary school, then there must be someone who will guide that student to broaden his horizons, develop his goals, and determine ways and means to reach them.

## GENERAL ARTICULATION STUDIES

Throughout the past two decades the concern for effective articulation between high school and college has been evident in various research studies. The relationship between high school and college has never been perfect. It has continually been plagued with difficulties. Romine made the statement, Articulation that is insufficient in quantity or lacking in quality is a threat to our educational structure and function. The conditions that cause insufficient articulation have become a challenge to many public school and college personnel. A review of general articulation studies indicates that common goals and problems, as well as the progress made by high schools and colleges in reaching these goals and solving common problems, are continually being evaluated and updated.

Bethel stated in 1956 that problems of articulation between high schools and junior colleges had not changed in the past twenty years. He was of the opinion that problems had increased due to larger student enrollments in both institutions. He suggested the following areas for possible examination:

1. Improved screening for specific aptitudes and interests in addition to consideration of general aptitudes.
2. Reconsideration of types of instructional programs and their content to include sufficient basic preparation essential to the continuation of education for all.
3. Reexamination of changing social and economic demands for their influence on the needs of students.

Thornton contended that positive communication between the faculties of secondary schools and community colleges would help ensure continuity in courses and that gaps or repetition would be avoided in the presentation of subject matter. He suggested the transition from high school to college may be smoothed for the student through four types of high school-community college cooperation:

1. The junior college and other colleges can be interpreted completely and accurately to the high school student so that he may choose intelligently rather than on the basis of hearsay or purely extrinsic criteria.
2. The transfer of appropriate parts of the permanent records of students will assist junior college counselors in continuing effective guidance procedures.
3. The two institutions can plan jointly for orientation activities for the high-school graduates, to help them become familiar with the opportunities and requirements of the local junior college.
4. Faculty groups from parallel departments of the two institutions can meet regularly to become acquainted with mutual problems and to work toward sequential organization of instruction.

Grable expressed the opinion that institutional status should be a secondary concern of the high schools and junior colleges. Their primary concern should be cooperation with each other to provide the best possible educational programs for students. He continued by offering the following suggestions for cooperative programs between high schools and junior colleges:

1. Early admission and early enrollment of superior high school students prior to their graduation from high school.

2. Formulation of cooperative high school-junior college faculty advisory committees.

3. Formulation of cooperative high school junior college faculty organizations that would aid in communication between the two groups.

4. Formulation of secondary and junior college faculty curriculum development programs. This would enhance the sequencing of certain curriculum areas.

5. Cooperative in-service and faculty development for the faculties of both institutions.

6. A cooperative effort between the high schools and junior colleges in developing specialized programs.

Pollack stated that he was convinced that some of the problems students encounter in moving from high school to college were the result of the absence of communication between secondary schools and colleges. High schools must make an effort to bring together the faculties of colleges and universities for the purpose of explaining school programs, courses, and problems. He concluded that student dissatisfaction and failure on the college campus will be the result of inadequate communication on the part of secondary schools and colleges.

In a recent seminar, sponsored by the Danforth Foundation in collaboration with the Institute for Development of Educational Activities, Inc. (Idea), more than one hundred secondary and higher education leaders met to discuss the relationship between colleges and secondary schools. The seminar delegates readily voiced their opinions concerning the "Approaches and Techniques for Attaining An Improved Relationship Between Secondary Schools and Colleges." These opinions, expressed during their small-group meetings, are summarized in the following manner:

1. There is a need for various processes to relate colleges and secondary schools, i.e., identify problems, break down barriers between personnel, and enable people in each institution to work with one another.

2. A commission should be established to develop recommendations for better relations between the two institutions.

3. There is a need for the creation of several associations composed of both college and secondary-school representatives.

4. Schools should make the curriculum more relevant by including "real world" concepts of teaching.

5. More variety in teaching devices and techniques needs to be developed.

6. Secondary schools should relay their feelings to colleges concerning teacher training and admissions requirements.

7. A faculty exchange program should be implemented between high schools and colleges.

8. Alternative ways should be explored that would reduce the length of time it takes a student to complete high school or college.

9. Consideration must be given to articulation problems to avoid artificial separation among various levels of education.

10. Effective cooperative efforts between secondary and college levels should receive acknowledgement.

11. Careful consideration should be made concerning questions of accreditation, certification, and other institutional requirements when attempting to work with high school-college relationships.

12. Evaluation of projects and relationships that tend to be difficult to measure must be met head-on.

13. Legislation should be considered for financing projects that would aid in better relations between both institutions.

14. Colleges should be encouraged to provide experimental relationships with high schools.

15. Various "avenues" of college entrance should be explored.

16. More effort in curriculum articulation is needed.

17. A variety of admissions criteria is needed to reflect the differentiated cultural backgrounds of students.

18. A reversal is needed of the domination of colleges over the secondary schools.

19. The high-school diploma should be eliminated and replaced by descriptive and supporting statement of achievement.

20. College visits to secondary schools should include college students and college faculty members.

21. Cooperation between colleges and secondary schools should be included in the educational program of teachers at all levels.

22. The repetition of curriculum between the 12th grade of high school and the first year of college should be eliminated--or one of these years should be abolished.

23. The campuses and courses at both institutions should be made available to students from both levels.

There are an extensive number of studies that contain many suggestions and recommendations for improvement of high school-college relations. Many of the recommendations acknowledge the fact that articulation problems are a joint responsibility of high schools and colleges. Seeking the solutions to these problems is of mutual importance to both institutions. It is interesting to note that although much attention has been given to articulation between high school and college, the literature points out that many articulation problems still exist.

# CHAPTER III

## COLLECTION AND PRESENTATION OF DATA

### PHASE I

#### Introduction

The purpose of Phase I of this study was to determine beneficial and non-beneficial performance of high school counselors and college representatives in the transition of students from high school to college. Through the use of a modified Critical Incident Technique, selected college freshman students were asked to report incidents they encountered in communication with their high school counselor and college representatives which they felt contributed to the ease of their transition to college. The second section of the Critical Incident Booklet asked the students to record three major problems they faced in the transition from high school to college. The compilation of these problems led to the development of the questionnaire used in Phase II of the study.

Twenty-five selected college freshman students in the fifty-seven Texas public colleges and universities that agreed to participate in this study were asked to respond to the questionnaire in Phase I. The twenty-five students were arbitrarily selected by an admissions officer in each of the participating institutions. Forty-seven Texas public colleges and universities

actually participated in Phase I. One thousand four hundred twenty-five Critical Incident Booklets were sent to those students and 994 replies, or 70 percent, were returned. The following is a tabulation of the personal characteristics reported by the respondents:

| Sex | | Race | |
|---|---|---|---|
| Females | 457 | Caucasion | 842 |
| Males | 529 | Black American | 46 |
| No response | 8 | Mexican American | 70 |
| | | Other | 8 |
| | | No Response | 28 |

| Size of High School Attended | Total Students |
|---|---|
| Class A | 107 |
| Class AA | 124 |
| Class AAA | 222 |
| Class AAAA | 437 |
| Other Classes | 61 |
| No Response | 43 |

The distribution of respondents by the type of institution they were attending follows:

| | Total Number of Institutions | Total Number Participated | Total Student Participation |
|---|---|---|---|
| Two-year Colleges | 50 | 33 | 710 |
| Four-year Colleges and Universities | 22 | 14 | 284 |

Distribution of Incidents

A total of 2,329 incidents was received from the 994 respondents. One thousand four hundred thirty-seven of these incidents were used in this study. In order to be usable it was necessary for each incident to contain some performance of a high school counselor and/or college representative which affected students in the transition from high school to college. Two hundred thirty-seven incidents that did not cite student problems of transition were eliminated. A total of 655 incidents that contained the words "None" or "Routine" were also deleted.

The incidents were then divided into groups based upon the following relationships:

1. College freshman student and high school counselor relationships
2. College freshman student and college representative relationships

Within each of the above mentioned groups the incidents were categorized into sub-groups of beneficial and non-beneficial incidents. Table I shows the tabulation of responses in each of the relationship groups and their sub-groups. Both groups displayed approximately the same number of total incidents and both reported a majority of beneficial incidents.

Grouping Incidents Into Categories

There were no pre-conceived categories used in the study since categories emerged as the incidents were reviewed. The breakdown of responses within the relationship

groups revealed various categories containing both beneficial and non-beneficial incidents. Some of these categories overlapped between the two groups. Tables II and III depict the tabulations of the categories for each relationship group.

TABLE I

BENEFICIAL AND NON-BENEFICIAL INCIDENTS ACCORDING TO RELATIONSHIP GROUPS

| Relationship Group | Total | Beneficial No. | Beneficial % | Non-beneficial No. | Non-beneficial % |
|---|---|---|---|---|---|
| College Freshman Students and High School Counselors | 745 | 447 | 60 | 298 | 40 |
| College Freshman Students and College Representatives | 692 | 415 | 60 | 277 | 40 |
| Totals | 1,437 | 862 | 60 | 575 | 40 |

College Freshman Student-High School Counselor Relationship

In the college freshman student-high school counselor relationship group (Table II), the category with the largest number of incidents mentioned was "Preparing for College". Those incidents included such concerns as taking the proper high school courses, having information available concerning college life, preparing and sending a transcript and other pertinent information, and the development of good study habits. In this particular category,

slightly over one half of the incidents were beneficial.

TABLE II

CATEGORIES OF INCIDENTS BETWEEN COLLEGE FRESHMAN STUDENTS AND HIGH SCHOOL COUNSELORS

| Category | Number of Incidents | Beneficial | Non-Beneficial |
|---|---|---|---|
| Making a Decision to Attend College | 103 | 72 | 31 |
| Preparing for College | 159 | 91 | 68 |
| Selection of a College | 146 | 103 | 43 |
| Available for Counseling | 132 | 45 | 87 |
| Entrance Exam Information | 76 | 48 | 28 |
| Selection of College Major and/or Career | 84 | 50 | 34 |
| Financial Aid Information | 45 | 38 | 7 |
| Totals | 745 | 447 | 298 |

"Selection of a College" ranked second in the total number of incidents with 146. This area included recommending a junior college over other colleges and universities, having information available on various colleges, and choosing a college that offered the best curriculum. The students recorded a large majority of beneficial incidents in this category which would tend to indicate the counselor's interest in helping students select an appropriate college.

One hundred thirty-two incidents were recorded in the category "Available for Counseling". This was the only section where non-beneficial incidents outnumbered the beneficial incidents. Many of these incidents cited by the students mentioned the difficulty in seeing a counselor, the counselor's interest or lack of interest in students, and statements that the counselor was always too busy to offer advice.

The category "Making a Decision to Attend College" contained 103 incidents. Those incidents contained statements where the counselor encouraged and advised the student to attend college after high school graduation, having information available on the advantages and disadvantages of attending college, and helping decide whether the student could perform academically in college. Over one half of the incidents mentioned in this category were beneficial.

In the category "Entrance Exam Information" the students were concerned with the interpretation of entrance examination scores, having information on the date and time of these examinations, the proper entrance examination to take, and how to complete the application for the examinations. The beneficial incidents outnumbered the non-beneficial incidents which indicated adequate counseling had taken place in informing students of these examinations.

The "Selection of College Major and/or Career" category included a total of eighty-four incidents. This area involved helping the student decide on a major field of study, obtaining

information on certain majors and careers, and helping select courses that would prepare the student for a major.

The category with the smallest number of reported incidents was "Financial Aid Information." Those incidents reflected the help and information made available to students for purposes of financing their college education. Thirty-eight beneficial incidents were reported in this category while only seven non-beneficial incidents were mentioned.

College Freshman Students -- College Representative Relationship

Table III displays the tabulation of the categories of incidents reported in the college freshman student - college representative relationship group. Dominating this group, with one-third of the total responses, were incidents in the category "Selection of College Courses." Those incidents included such concerns as recommending the correct college courses, help in making out a class schedule, selecting courses that would transfer to four-year institutions, and helping student select courses for a specific major or career objective. The responses in this category were closely divided between beneficial (121) and non-beneficial (108) which indicates that college representatives may need to put more emphasis into this area.

Two categories that had an almost equal number of incidents reported were "Recruiting Students for College" and "Available To Help Students." These two categories accounted for another one-third of the total incidents recorded in this group.

Incidents in the category "Recruiting Students for College" included the type of presentation given at college night programs, college representative's attitude toward the college they represented, and the amount of information given to students concerning all areas of college life. In this category seventy-two beneficial incidents were reported and sixty-three non-beneficial incidents which appears to reflect students interest in receiving proper information about attending college.

In the category "Available to Help Students," incidents cited by the respondents mentioned college representatives, especially college counselors, taking the time to help with various problems and the encouragement given to students to attain a college education. The beneficial incidents outnumbered the non-beneficial incidents seventy-nine to forty-nine which indicated student satisfaction in attaining this counseling service.

Ninety incidents were recorded in the category "Financial Aid Information." Student satisfaction was apparent in this area since only seventeen non-beneficial responses were recorded. Receiving advice on how to obtain loans, grants, scholarships, jobs and other types of aid were reflected by student comments in this category.

The category "Selection of a College Major and/or Career" contained fifty-seven incidents, forty-four beneficial and only thirteen non-beneficial incidents. Student satisfaction was apparent in this area which included the college representative's



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TABLE III

CATEGORIES OF INCIDENTS BETWEEN COLLEGE FRESHMAN STUDENTS AND COLLEGE REPRESENTATIVES

| Category | Number of Incidents | Beneficial | Non-Beneficial |
|---|---|---|---|
| Recruiting Students For College | 136 | 72 | 63 |
| Preparation To Enter College | 53 | 26 | 27 |
| Available To Help Students | 128 | 79 | 49 |
| Selection of A College Major And/Or Career | 57 | 44 | 13 |
| Selection of College Courses | 229 | 121 | 108 |
| Financial Aid Information | 90 | 73 | 17 |
| Totals | 692 | 415 | 217 |

help in choosing a major and his having up-to-date information available on various majors and career opportunities.

In this relationship group, the category with the smallest number of incidents reported was "Preparation to Enter College." This was the only category in the group that had more non-beneficial incidents (27) than beneficial incidents (26). The incidents in this category included such concerns as reviewing and interpreting entrance exam scores with students, registration problems, completion of admission forms and adequate counseling prior to college entrance.

## PHASE II

### Introduction

The second section of the Critical Incident Booklet asked selected college freshman students to record three major problems that they had experienced in moving from high school to the college or university they were attending. This phase of the study had a twofold purpose. First, the major student responses to the second section of the Critical Incident Booklet. Second, this phase was also designed to determine what differences, if any, existed among the mean scores as perceived by selected students, selected counselors, junior college admission officers, and senior college admission officers on a questionnaire measuring their perception of the student articulation problems indentified in this study.

After categorizing 1,941 problems, a total of ten major problem areas emerged that became the basis for the second questionnaire. One thousand six hundred ninety-seven of these questionnaires were sent to selected college freshman students, selected high school counselors, junior college admission officers, and senior college admission officers.

Selected students completing the Critical Incident Booklet in Phase I did not necessarily participate in Phase II of the study. Twenty-five selected college freshman students in the fifty-seven Texas public colleges and universities that agreed to participate in this study were asked to respond to questionnaire. The twenty-five students were arbitrarily selected by an admissions officer in each of the participating institutions. Fifty Texas public colleges and universities actually participated in Phase II.

A total of 1,379 questionnaires, or 81 percent, was returned by the four groups. The following is a tabulation of replies received from each group:

| Group | Total Questionnaires Mailed | Total Questionnaires Returned | Percent of Return |
|---|---|---|---|
| Students | 1425 | 1142 | 80 |
| High School Counselors | 199 | 168 | 84 |
| Junior College Admission Officers | 51 | 49 | 96 |
| Senior College Admission Officers | 22 | 20 | 91 |
| Totals | 1697 | 1379 | 81 |
| ETSSC Counselors | 51 | 51 | 100 |

Additional information was also obtained from the respondents in each group. A tabulation of these data shows the following:

Selected College Freshman Students (1142)

Junior College Students ---- 780 Returned Questionnaires

Senior College Students ---- 362 Returned Questionnaires

Male Students ---- 606

Female Students ---- 518

No Response ---- 18

| Race | Males | Females | Total |
|---|---|---|---|
| Caucasian | 483 | 421 | 904 |
| Black American | 37 | 39 | 76 |
| Mexican-American | 45 | 32 | 77 |
| Other | 6 | 5 | 11 |
| No response | | | 74 |

| Size of High School Attended | Total Students |
|---|---|
| Class A | 84 |
| Class AA | 170 |
| Class AAA | 271 |
| Class AAAA | 416 |
| Other Classes | 70 |
| No Response | 131 |

Selected Public High School Counselors (168)

Male counselors ---- 79

Female counselors ---- 89

| | Male | Female |
|---|---|---|
| Counselor certificates held | 67 | 81 |
| No certificates held | 12 | 8 |

| Size of High School | Total Counselors |
|---|---|
| Class A | 29 |
| Class AA | 43 |
| Class AAA | 41 |
| Class AAAA | 53 |
| No response | 2 |

Admission Officers (69)

| | Male | Female |
|---|---|---|
| Junior Colleges | 44 | 5 |
| Senior Colleges | 20 | 0 |

| Size Range | Number of Participating Institutions |
|---|---|
| Below 1000 | 8 |
| 1001 - 3000 | 23 |
| 3001 - 5000 | 17 |
| 5001 - 10,000 | 9 |
| Above 10,000 | 12 |

## Examination and Analysis of the Null Hypotheses

Each null hypothesis presented in Chapter I was tested by application of inferential statistics. An F test was used to test the general null hypothesis and related sub-hypotheses. The F values at or above 2.60 are statis-

tically significant at the .05 level of confidence with 1,378 degrees of freedom. Major null hypotheses one through six were analyzed by use of the t test for uncorrelated samples. The t values at or above 1.96 are statistically significant at the .05 level of confidence with 1,375 degrees of freedom. The data related to each null hypothesis are presented both in narrative form and in the appropriate tables below.

General Null Hypothesis. There are no significant differences among the mean scores of selected public college and university freshman students, selected public high school counselors, public junior college admission officers, and public senior college and university admission officers on a questionnaire measuring their perception of the student articulation problems identified in this study. The related sub-hypotheses stated that no significant differences exist among the four groups in each of the ten student articulation problems.

The data in Table IV reveal that seven areas showed a relationship which was significant at the .05 level. Seven of the sub-hypotheses were rejected for the following related areas: Adjusting to College Life, Admission to College, Study Habits, Transportation, Accepting Responsibility, Financing of College Education, and Making New Friends. The sub-hypotheses were accepted for the following three problems: Choosing a Major Field of Study, Choosing the Right College,

and Adjusting to College Teachers and Courses. Therefore, there were statistically significant differences in the mean scores among the four groups in their perceptions of seven of the ten student articulation problems.

Major Null Hypothesis One. There is no significant difference between the mean scores of selected public college and university freshman students and selected public high school counselors on a questionnaire measuring their responses to each of the ten student articulation problems identified in this study.

The data in Table V reveal that six problem areas showed a difference which was significant at the .05 level. The null hypothesis was rejected for the following related areas: Adjusting to College Life, Admission to College, Transportation, Accepting Responsibility, Financing of College Education, and Making New Friends. The null hypothesis was accepted for the following four problems: Choosing a Major Field of Study, Study Habits, Choosing the Right College, and Adjusting to College Teachers and Courses. Therefore, there were statistically significant differences between selected public college and university freshman students and selected public high school counselors in their perceptions of six of the ten student articulation problems.

Major Null Hypothesis Two. There is no significant difference between the mean scores of selected public college

TABLE IV

F VALUES AMONG SELECTED COLLEGE STUDENTS, SELECTED HIGH SCHOOL COUNSELORS, JUNIOR COLLEGE ADMISSION OFFICERS, AND SENIOR COLLEGE ADMISSION OFFICERS CONCERNING STUDENT ARTICULATION PROBLEMS

| Problem | F | |
|---|---|---|
| Choosing a major field of study | 1.174 | |
| Adjusting to college life | 21.644 | ** |
| Admission to college | 6.198 | ** |
| Study Habits | 3.996 | ** |
| Transportation | 5.111 | ** |
| Choosing the right college | 1.544 | |
| Adjusting to college teachers and courses | 1.275 | |
| Accepting responsibility | 14.416 | ** |
| Financing of college education | 6.985 | ** |
| Making new friends | 3.461 | * |

* Significant at or above .05 level
** Significant at or above .01 level

TABLE V

t VALUES BETWEEN SELECTED PUBLIC COLLEGE AND UNIVERSITY FRESHMAN STUDENTS AND SELECTED PUBLIC HIGH SCHOOL COUNSELORS CONCERNING STUDENT ARTICULATION PROBLEMS

| Problem | t | |
|---|---|---|
| Choosing a major field of study | 0.718 | |
| Adjusting to college life | 5.107 | *** |
| Admission to college | 3.013 | ** |
| Study Habits | 1.483 | |
| Transportation | 2.671 | ** |
| Choosing the right college | 1.065 | |
| Adjusting to college teachers and courses | 0.823 | |
| Accepting responsibility | 3.949 | *** |
| Financing of college education | 3.099 | ** |
| Making new friends | 2.252 | * |

* Significant at or above .05 level
** Significant at or above .01 level
*** Significant at or above .001 level

and university freshman students and public junior college admission officers on a questionnaire measuring their responses to each of the ten student articulation problems identified in this study.

The data in Table VI show that two areas showed a relationship which was significant at the .05 level. The null hypothesis was rejected for the following two problems: Adjusting to College Life and Accepting Responsibility. The null hypothesis was accepted for the following eight problems: Choosing a Major Field of Study, Admission to College, Study Habits, Transportation, Choosing the Right College, Adjusting to College Teachers and Courses, Financing of College Education, and Making New Friends. Thus, there were statistically significant differences between selected public college and university freshman students and public junior college admission officers in their perceptions of two of the ten student articulation problems.

Major Null Hypothesis Three. There is no significant difference between the mean scores of selected public college and university freshman students and public senior college and university admission officers on a questionnaire measuring their responses to each of the ten student articulation problems identified in this study.

The data in Table VII indicate that two areas showed a relationship which was significant at the .05 level. The null hypothesis was rejected for the following two problems:

TABLE VI

t VALUES BETWEEN SELECTED PUBLIC COLLEGE AND UNIVERSITY FRESHMAN STUDENTS AND PUBLIC JUNIOR COLLEGE ADMISSION OFFICERS CONCERNING STUDENT ARTICULATION PROBLEMS

| Problem | t | |
|---|---|---|
| Choosing a major field of study | 0.452 | |
| Adjusting to college life | 2.140 | * |
| Admission to college | 0.213 | |
| Study habits | 0.308 | |
| Transportation | 0.235 | |
| Choosing the right college | 0.734 | |
| Adjusting to college teachers and courses | 0.870 | |
| Accepting responsibility | 2.244 | * |
| Financing of college education | 1.053 | |
| Making new friends | 0.482 | |

* Significant at or above .05 level

TABLE VII

t VALUES BETWEEN SELECTED PUBLIC COLLEGE AND UNIVERSITY FRESHMAN STUDENTS AND PUBLIC SENIOR COLLEGE AND UNIVERSITY ADMISSION OFFICERS CONCERNING STUDENT ARTICULATION PROBLEMS

| Problem | t | |
|---|---|---|
| Choosing a major field of study | 1.083 | |
| Adjusting to college life | 2.078 | * |
| Admission to college | 0.295 | |
| Study habits | 2.009 | * |
| Transportation | 0.854 | |
| Choosing the right college | 0.751 | |
| Adjusting to college teachers | 0.814 | |
| Accepting responsibility | 1.703 | |
| Financing of college education | 0.5923 | |
| Making new friends | 0.014 | |

* Significant at or above .05 level

Adjusting to College Life and Study Habits. The null hypothesis was accepted for the following eight problems: Choosing a Major Field of Study, Admission to College, Transportation, Choosing the Right College, Adjusting to College Teachers, Accepting Responsibility, Financing of College Education, and Making New Friends. Therefore, there were statistically significant differences between selected public college and university freshman students and public senior college and university admission officers in their perceptions of two of the ten student articulation problems.

Major Null Hypothesis Four. There is no significant difference between the mean scores of selected public high school counselors and public junior college admission officers on a questionnaire measuring their responses to each of the ten student articulation problems identified in this study.

The data in Table VIII show that none of the ten problems has a relationship which was significant at the .05 level. The null hypothesis was accepted in all ten problems. Thus, there were no statistically significant differences between selected public high school counselors and public junior college admission officers in their perceptions of the ten student articulation problems.

Major Null Hypothesis Five. There is no significant difference between the mean scores of selected public high school counselors and public senior college and university admission officers on a questionnaire measuring their responses to each of the ten student articulation problems identified in this study.

TABLE VIII

t VALUES BETWEEN SELECTED PUBLIC HIGH SCHOOL COUNSELORS AND PUBLIC JUNIOR COLLEGE ADMISSION OFFICERS CONCERNING STUDENT ARTICULATION PROBLEMS

| Problem | t |
|---|---|
| Choosing a major field of study | 0.040 |
| Ad-usting to college life | 0.676 |
| Admission to college | 1.726 |
| Study habits | 0.477 |
| Transportation | 1.148 |
| Choosing the right college | 1.202 |
| Adjusting to college teachers and courses | 0.353 |
| Accepting responsibility | 0.006 |
| Financing of college education | 0.630 |
| Making new friends | 0.713 |

Note: t values at or above 1.96 are significant at the .05 level with 1,375 degrees of freedom.

The data in Table IX show that none of the ten problems has a relationship which was significant at the .05 level. The null hypothesis was accepted in all ten problems. Thus, there were no statistically significant differences between selected public high school counselors and public senior college and university admission officers in their perceptions of the ten student articulation problems.

Major Null Hypothesis Six. There is no significant difference between the mean scores of public junior college admission officers and public senior college and university admission officers on a questionnaire measuring their responses to each of the ten student articulation problems identified in this study.

The data in Table X show that none of the ten problems has a relationship which was significant at the .05 level. The null hypothesis was accepted in all ten problems. Thus, there were no statistically significant differences between public junior college admission officers and public senior college and university admission officers in their perceptions of the ten student articulation problems.

In addition to testing the null hypotheses, further analyses of the responses were made. Data in Tables XI through XX present in percentage form the responses of each

TABLE IX

$t$ VALUES BETWEEN SELECTED PUBLIC HIGH SCHOOL COUNSELORS AND PUBLIC SENIOR COLLEGE AND UNIVERSITY ADMISSION OFFICERS CONCERNING STUDENT ARTICULATION PROBLEMS

| Problem | $t$ |
|---|---|
| Choosing a major field of study | 0.781 |
| Adjusting to college life | 0.197 |
| Admission to college | 0.771 |
| Study habits | 1.397 |
| Transportation | 0.118 |
| Choosing the right college | 0.344 |
| Adjusting to college teachers and courses | 0.488 |
| Accepting responsibility | 0.244 |
| Financing of college education | 0.517 |
| Making new friends | 0.800 |

Note: $t$ values at or above 1.96 are significant at the .05 level with 1,375 degrees of freedom.

TABLE X

t VALUES BETWEEN PUBLIC JUNIOR COLLEGE ADMISSION OFFICERS AND PUBLIC SENIOR COLLEGE AND UNIVERSITY ADMISSION OFFICERS CONCERNING STUDENT ARTICULATION PROBLEMS

| Problem | t |
|---|---|
| Choosing a major field of study | 0.672 |
| Adjusting to college life | 0.590 |
| Admission to college | 0.368 |
| Study habits | 1.538 |
| Transportation | 0.596 |
| Choosing the right college | 1.042 |
| Adjusting to college teachers and courses | 0.213 |
| Accepting responsibility | 0.213 |
| Financing of college education | 0.076 |
| Making new firends | 0.276 |

Note: t values at or above 1.96 are significant at the .05 level with 1,375 degrees of freedom.

group to the ten articulation problems on the Phase II questionnaire. For purposes of identification, each group was assigned the following number:

| | |
|---|---|
| Group I | Selected Public College and University Freshman Students |
| Group II | Selected Public High School Counselors |
| Group III | Senior College and University Admission Officers |
| Group IV | Junior College Admission Officers |
| Group V | High School Counselors - East Texas School Study Council |

As displayed in Table XI over 50 percent of the five groups reported the problem of "Choosing a Major Field of Study" as being "very important" to "extremely important." Sixty-five percent of the college freshman students rated the problem very high in importance. Ten percent or less of all groups felt that the problem was "less important" or "not important." The responses from all the groups appeared to indicate that this particular student articulation problem was a major area of concern.

TABLE XI

GROUP PERCENTAGES TO ARTICULATION PROBLEM
CHOOSING A MAJOR FIELD OF STUDY

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 38 | 27 | 25 | 6 | 4 |
| II | 29 | 29 | 35 | 5 | 2 |
| III | 11 | 42 | 37 | 10 | 0 |
| IV | 25 | 33 | 33 | 9 | 0 |
| V | 22 | 36 | 36 | 6 | 0 |

Table XII shows the responses in percentage form to the problem of "Adjusting to College Life." High school counselors and senior college and university admission officers expressed a greater concern for the problem than did students, ETSSC Counselors, and junior college admission officers. The opinion of 100 percent of the respondents in Group III reflected that "Adjusting to College Life" was "important" to "extremely important." Thirty-four percent of the college freshman students recorded this problem as being "less important" or "not important." These responses indicated that, according to the students, there was little difficulty in their adjustment to college life.

TABLE XII

GROUP PERCENTAGES TO ARTICULATION PROBLEM
ADJUSTING TO COLLEGE LIFE

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 11 | 21 | 34 | 21 | 13 |
| II | 18 | 38 | 35 | 8 | 1 |
| III | 10 | 53 | 37 | 0 | 0 |
| IV | 17 | 31 | 33 | 17 | 2 |
| V | 20 | 26 | 36 | 18 | 0 |

Over 60 percent of the high school counselors and ETSSC Counselors responded, as shown in Table XIII, that the problem "Admission Groups I, III, and IV rated the problem

lower on the scale than the counselors. In fact, 25 percent of the junior college admission officers said that the problem was "less important" or "not important." This would appear to indicate the relaxed admission standards of public junior colleges. The high school counselors responses indicated a major concern in the problem of students attaining admission to various colleges and universities.

TABLE XIII

GROUP PERCENTAGES TO ARTICULATION PROBLEM
ADMISSION TO COLLEGE

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 19 | 27 | 34 | 14 | 6 |
| II | 28 | 36 | 26 | 8 | 2 |
| III | 21 | 21 | 53 | 5 | 0 |
| IV | 15 | 33 | 27 | 21 | 4 |
| V | 28 | 33 | 33 | 6 | 0 |

Table XIV shows that over 65 percent of each group specified the problem of "Study Habits" as "very important" to "extremely important." One hundred percent of the senior college and university admission officers and 98 percent of the ETSSC Counselors rated the problem as "important" to "extremely important." This particular articulation problem was given a higher percent of importance than any of the other nine problems. However, 10 percent of the student respondents did express the problem as

being "less important" or "not important." The responses from all groups seemed to indicate that more emphasis is needed in the area of study habits.

As shown in Table XV, the majority of responses of all five groups to the problem of "Transportation" was "important" to "not important." Twenty-five percent of Group IV respondents reported the problem to be "very important" to "extremely important." However, over 40 percent of each group related that the

TABLE XIV

GROUP PERCENTAGES TO ARTICULATION PROBLEM
STUDY HABITS

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 36 | 30 | 24 | 8 | 2 |
| II | 38 | 38 | 17 | 6 | 1 |
| III | 63 | 26 | 11 | 0 | 0 |
| IV | 33 | 36 | 23 | 8 | 0 |
| V | 46 | 40 | 12 | 2 | 0 |

problem was "less important" or "not important." These responses seemed to indicate that the student articulation problem of "Transportation" was not a major concern of any of the groups.

TABLE XV

GROUP PERCENTAGES TO ARTICULATION PROBLEM
TRANSPORTATION

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 2 | 12 | 42 | 31 | 13 |
| II | 0 | 16 | 11 | 68 | 5 |
| III | 1 | 5 | 32 | 47 | 15 |
| IV | 9 | 16 | 28 | 26 | 21 |
| V | 0 | 12 | 26 | 50 | 12 |

The reaction of the five groups to the articulation problem of "Choosing the Right College to Attend" was presented in Table XVI. A majority of respondents in Groups I, II, and III rated the problem "very important" to "extremely important." Sixty-three percent of Group III's opinion of the problem was "very important." Twenty-one percent of the Junior College was "less important" to "not important." The responses to this problem appear to indicate that it was a major concern of students, counselors, and senior college admission officers.

TABLE XVI

GROUP PERCENTAGES TO ARTICULATION PROBLEM
CHOOSING THE RIGHT COLLEGE TO ATTEND

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 23 | 30 | 31 | 10 | 6 |
| II | 19 | 39 | 35 | 6 | 1 |
| III | 16 | 63 | 16 | 5 | 0 |
| IV | 17 | 27 | 35 | 19 | 2 |
| V | 12 | 34 | 42 | 10 | 2 |

Over 50 percent of all five groups show in Table XVII that the problem "Adjusting to College Teachers and Courses" was "very important" to "extremely important." Sixty-four percent of Group III respondents rated this problem very high which seemed to indicate a concern senior college and university admission officers have in students adjusting to teachers and courses. However, 18 percent of the student respondents felt that this problem was "less important" or "not important." The responses from all groups points out that the student articulation problem of "Adjusting to College Teachers and Courses" was a major area of concern.

TABLE XVII

GROUP PERCENTAGES TO ARTICULATION PROBLEM
ADJUSTING TO COLLEGE TEACHERS AND COURSES

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 21 | 32 | 29 | 14 | 4 |
| II | 18 | 38 | 34 | 8 | 2 |
| III | 32 | 32 | 26 | 10 | 0 |
| IV | 21 | 35 | 38 | 6 | 0 |
| V | 18 | 40 | 34 | 8 | 0 |

The student articulation problem "Accepting Responsibility," as shown in Table XVIII, was another major concern expressed by all five groups. Sixty percent or more of each group reported this problem to be "very important" or "extremely important." These responses appeared to indicate a need for assistance to help students in the areas of self-discipline and self-confidence. Seventeen percent of the students, however, again rated this problem as "less important" to "not important."

TABLE XVIII

GROUP PERCENTAGES TO ARTICULATION PROBLEM
ACCEPTING RESPONSIBILITY

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 32 | 28 | 23 | 10 | 7 |
| II | 49 | 29 | 16 | 5 | 1 |
| III | 42 | 42 | 16 | 0 | 0 |
| IV | 48 | 27 | 23 | 0 | 2 |
| V | 42 | 36 | 20 | 2 | 0 |

Table XIX reveals that the large majority of responses to the problem "Financing of College Education" fell in the middle range of the scale. Ninety percent of senior college and university admission officers reported the problem as "important" or "very important." This appears to point out the concern in many four-year institutions of the increase of student expenses over the past few years. Twenty-one percent of the students recorded "Financing of College Education" as "less important" or "not important" which might indicate the availability of various kinds of student financial aid. Seventy percent of the ETSSC Counselors rated the problem "very important" to "extremely important."

Reaction to the student articulation problem of "Making New Friends" was displayed in Table XX. Again the majority of

responses fell in the middle range of the scale; however, thirty-four percent of the students reported the problem as being "less important" or "not important." These responses seemed to indicate that this problem was not considered an area of major concern by

TABLE XIX

GROUP PERCENTAGES TO ARTICULATION PROBLEM
FINANCING OF COLLEGE EDUCATION

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 27 | 25 | 26 | 11 | 10 |
| II | 29 | 37 | 31 | 2 | 1 |
| III | 10 | 53 | 37 | 0 | 0 |
| IV | 23 | 33 | 40 | 2 | 2 |
| V | 30 | 40 | 28 | 0 | 2 |

the students. High school counselors expressed a different opinion of this problem. Forty-one percent of the counselors felt that "Making New Friends" was "very important" or "extremely important."

Table XXI shows a comparison between selected college freshman students and high school counselors of the East Texas School Study Council in their ranking of the ten student articulation problems.

TABLE XX

GROUP PERCENTAGES TO ARTICULATION PROBLEM
MAKING NEW FRIENDS

| Group | Extremely Important % | Very Important % | Important % | Less Important % | Not Important % |
|---|---|---|---|---|---|
| I | 13 | 21 | 32 | 21 | 13 |
| II | 12 | 29 | 42 | 14 | 3 |
| III | 0 | 26 | 47 | 26 | 0 |
| IV | 4 | 31 | 38 | 27 | 0 |
| V | 16 | 20 | 52 | 10 | 2 |

TABLE XXI

RANK ORDER OF THE ARTICULATION PROBLEMS BETWEEN SELECTED COLLEGE FRESHMAN STUDENTS AND ETSSC HIGH SCHOOL COUNSELORS

| | 1,142 Students | | 51 Counselors (ETSSC) |
|---|---|---|---|
| 1. | Study Habits | 1. | Study Habits |
| 2. | Choosing a Major Field of Study | 2. | Accepting Responsibilities |
| 3. | Accepting Responsibilities | 3. | Financing |
| 4. | Choosing the Right College | 4. | Admission to College |
| 5. | Adjusting to College Teachers and Courses | 5. | Choosing a Major Field of Study |
| 6. | Financing | 6. | Adjusting to College Teachers & Courses |
| 7. | Admission to College | 7. | Choosing the Right College |
| 8. | Making New Friends | 8. | Adjusting to College Life |
| 9. | Adjusting to College Life | 9. | Making New Friends |
| 10. | Transportation | 10. | Transportation |

# CHAPTER IV

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### SUMMARY

A review of the literature revealed that student transition from high school to college has been a problem since the opening of the first secondary school. High school and college officials seemed to be constantly seeking better methods to improve student transition. The concern of both groups appeared to be the smooth transition of students from high school to the college or university. It was felt that a study of student articulation between public high schools and the public colleges and universities in Texas would be helpful to representatives of both types of institutions.

The purpose of this study was to determine beneficial and non-beneficial performance of public high school counselors and public college and university representatives as perceived by selected college and university freshman students. A further purpose was to determine if significant differences existed among the mean scores of selected public college and university freshman students, selected public high school counselors, public junior college admission officers, and public senior college and university admission officers on a questionnaire measuring their perception of the student articulation problems identified in this study.

The study was divided into two phases. Phase I consisted of the collection of incidents of beneficial and non-beneficial performance on the part of high school counselors and college representatives. The incidents were collected by sending a modified Critical Incident Booklet to twenty-five institutions participating in the study. The twenty-five students in each institution were arbitrarily selected by an admissions officer. A total of 2,329 incidents was received from 994 students respondents who returned the Phase I questionnaire. One thousand four hundred thirty-seven of these incidents were used in this study. In order to be usable it was necessary for each incident to contain some performance of a high school counselor and/or college representative which affected students in the transition from high school to college.

The incidents were first grouped according to relationships between students and high school counselors and relationships between students and college representatives. Both groups showed approximately the same number of total incidents and both reported a majority of beneficial incidents. The breakdown of responses within the relationship groups revealed various categories containing both beneficial and non-beneficial incidents.

In the college freshman student-high school counselor relationship group, a total of 745 incidents was reported. The seven categories that emerged from this group were as follows:

Making a Decision to Attend College, Preparing for College, Selection of a College, Available for Counseling, Entrance Examination Information, Selection of College Major and/or Career, and Financial Aid Information. A total of 447 beneficial incidents and 298 non-beneficial incidents was recorded in this group.

One category in this group that caused students to show concern was "Available for Counseling." There were forty-five beneficial incidents and eighty-seven non-beneficial incidents reported in this category. Student comments indicated a difficulty in seeing the counselor and that the counselor seemed too busy to offer advice. Each of the remaining six categories reported more beneficial than non-beneficial incidents. This would tend to indicate student satisfaction in those various relationships with their high school counselor.

In the college freshman student-college representative relationship group, a total of 692 incidents was reported. The six categories that emerged from this group were as follows: Recruiting Students for College, Preparation to Enter College, Available to Help Students, Selection of a College Major and/or Career, Selection of Colleges Courses, and Financial Aid Information. A total of 415 beneficial incidents and 277 non-beneficial incidents was recorded in this group.

A major area of student concern was "Selection of College Courses." This category contained 229 of the 692 incidents reported in the group. One hundred twenty-one were beneficial incidents and 108 were non-beneficial incidents.

Another concern of students was "Preparation to Enter College". There were twenty-six beneficial and twenty-seven non-beneficial incidents reported in this category. Student comments indicated such concerns as reviewing and interpreting entrance exams, registration problems, and completion of admission forms. Each of the remaining four categories reported more beneficial than non-beneficial incidents. This might tend to indicate student satisfaction in those various relationships with college representatives.

Phase II of this study was developed from information derived from the second section of the Critical Incident Booklet. The students were asked to record three major problems that they had experienced in moving from high school to the college or university which they were attending. After categorizing the 1,941 problems, a total of ten major articulation problem areas emerged that became the basis for the second questionnaire (Appendix F). One thousand six hundred ninety-seven of these questionnaires were sent to selected college and university freshman students, selected high school counselors, public junior college admission officers, and public senior college and university admission officers. A total of 1,379 questionnaires, or 81 percent, was returned by the four groups.

The questionnaire was used to determine if significant differences existed among and between the means of the four groups in their perceptions of the ten student articulation

problems. The General Null Hypothesis and related sub-hypotheses were tested by application of the F test. Major hypotheses One through Six were tested by application of the *t* test.

The results of the statistical analysis revealed significant differences among the mean scores of the four groups in the student articulation problems of "Adjusting to College Life," "Admission to College," "Study Habits," "Transportation," "Accepting Responsibility," "Financing of College Education," and "Making New Friends." An analysis by the use of the *t* test showed significant differences existed between the means of selected college and university freshman students and selected public high school counselors in the student articulation problems of "Adjusting to College Life," "Admission to College," "Transportation," "Accepting Responsibility," "Financing of College Education," and "Making New Friends."

A further analysis of the data showed significant differences existed between the means of selected college and university freshman students and public junior college admission officers in the student articulation problems of "Adjusting to College Life" and "Accepting Responsibility." In determining if significant differences existed between the means of selected college and university freshman students and public senior college and university admission officers, the data revealed there were differences in the student articulation problems of "Adjusting to College Life" and "Study Habits." The results

of determining if significant differences existed between the means of selected public high school counselors and public junior college admission officers disclosed no significant differences in their perceptions of each of the ten student articulation problems.

An analysis of the data showed no significant difference existed between the means of selected public high school counselors and public senior college and university admission officers in their perceptions of each of the ten student articulation problems. An analysis of the data also revealed no significant differences existed between the means of public junior college admission officers and public senior college and university admission officers in their perceptions of each of the ten student articulation problems.

## CONCLUSIONS

Based on the findings of this study the following conclusions were made:

1. A review of the literature indicated that although much research has been completed on the improvement of articulation between high school and college, it appears that many problems still exist. Improved communications, effective cooperation, faculty intervisitation, and student transition are some of the problems still confronting officials at both the secondary and college levels.

2. The conclusion was reached that due to the apparent interest in student articulation problems, a large percent of responses to the survey instruments was received.

3. According to the responses of selected college and university freshman students, it was concluded that high school counselors are providing beneficial experiences to students in the areas of: Making a Decision to Attend College, Preparing for College, Selection of a College, Entrance Examination Information, Selection of a College Major and/or Career, and Financial Aid Information.

4. According to the responses of selected college and university freshman students, it was concluded that high school counselors are not providing beneficial experiences to students in the area of "Available for Counseling".

5. In regard to the performance of college representatives in student transition from high school to college, the responses from college and university freshman students indicated the following areas as beneficial: Recruiting Students for College, Available to Help Students, Selection of a College Major and/or Career, Selection of College Courses, and Financial Aid Information.

6. In regard to the performance of college representatives in student transition from high school to college, the responses from college and university freshman students indicated the area of "Preparation to Enter College" as non-beneficial performance.

7. Although a majority of student responses indicated beneficial experiences with college representative performance in the area of "Selection of College Courses", the 108 non-beneficial incidents cannot be overlooked. It seems evident, therefore, that college representatives are not providing enough emphasis in helping students plan and select college courses.

8. The student responses to the second section of the modified Critical Incident Booklet, and subsequent categorization, disclosed the ten student articulation problems identified in this study. Therefore, it was concluded that these ten areas are valid student articulation problems.

9. There were significant differences among the mean scores of selected public college and university freshman students, selected public high school counselors, public junior college admission officers, and public senior college and university admission officers in their perceptions of the following seven student articulation problems: Adjusting to College Life, Admission to College, Study Habits, Transportation, Accepting Responsibility, Financing of College Education, and Making New Friends. Therefore, it was concluded that further testing was needed to determine where the differences existed between the four groups concerning these student articulation problems.

10. Selected public college and university freshman students and selected public high school counselors differed

significantly in six of the ten student articulation problems. Adjusting to College Life, Admission to College, Accepting Responsibility, Financing of College Education, and Making New Friends were found to be more important to counselors than to students. The problem of "Transportation" was indicated as being more important to students than counselors. Therefore, it was concluded that an improvement in communication is needed between students and high school counselors in these particular areas.

11. In determining if significant differences existed between selected public college and university freshman students and public junior college admission officers concerning their perceptions of the ten student articulation problems, two areas showed a relationship which was significant. It was concluded that "Adjusting to College Life" and "Accepting Responsibility" were regarded as being more important to junior college admission officers than to college and university freshman students.

12. Two of the ten student articulation problems showed significant differences between selected public college and university freshman students and public senior college and university admission officers. The conclusion was that the student articulation problems "Adjusting to College Life" and "Study Habits" were considered as being more important to senior college admission officers than to college and university freshman students.

13. When comparisons were made between selected public high school counselors and public junior college admission officers, none of the t values was found to be significant. Therefore, it was concluded that these two groups did not differ in their perceptions of the ten student articulation problems.

14. When comparisons were made between selected public high school counselors and public senior college and university admission officers, none of the t values was found to be significant. Therefore, it was concluded that these two groups did not differ in their perceptions of the ten student articulation problems.

15. When comparisons were made between public junior college admission officers and public senior college and university admission officers, none of the t values was found to be significant. Therefore, it was concluded that these two groups did not differ in their perceptions of the ten student articulation problems.

## RECOMMENDATIONS

Based on the presentation of the data in Chapter III and the conclusions listed above, recommendations for improving student articulation are as follows:

1. It is suggested that all high school counselors and college officials be made aware of the student articulation problems identified by this study.

2. High school counselors should be more concerned about making themselves available to graduating seniors seeking information about colleges and universities.

3. To help improve student articulation from high school to college, it is suggested that high schools evaluate their programs of guidance for college bound students by incorporating follow-up studies on their graduating seniors.

4. It is recommended that colleges and universities evaluate their programs of guidance for college freshmen through the use of questionnaires, group seminars, and individual consultations.

5. Informing students on how to prepare to enter college should be given more attention by college representatives. Effective communications to high school counselors, students, and parents by colleges and universities is needed to help alleviate problems in the preparation to enter college.

6. More effort should be given by colleges and universities to use all available information concerning a student when course selections and assignments are made. Information such as high school transcript, entrance examination scores, previous college credit earned, and past experiences should be factors considered in the placement of students.

7. All high schools and colleges should consider implementing a program of counselor and faculty intervisitation. This type of program would help alleviate the duplication of course content, enhance the understanding of problems encountered by both groups, and provide for the exchange of ideas related to student transition.

8. Colleges and universities should take the initiative in planning and conducting periodic articulation conferences for high school and college counselors, college students, college and university admission officers, and college and university faculty representatives.

9. In order to understand the problems of student transition from high school to college, it is recommended that high school counselors initiate more avenues of communication with former students. Questionnaires, individual conferences, college campus visitations are some of the ways counselors might discover new transition problems.

10. Colleges and universities should report student academic progress and adjustment problems to the high schools. This would aid the high schools in their evaluation of curriculum content, college-prep and advanced course offerings, and practices related to the smooth transition of students.

11. To help insure the improvement of high school-college relations, it is suggested that every high school, college, and university develop and implement a program of articulation.

12. It is recommended that a state wide articulation committee be established in Texas consisting of public school administrators, college and university officials, and representatives from the Texas Education Agency and the Coordinating Board for Texas Colleges and Universities. This committee could provide the leadership in forming effective high school-college articulation programs.

## RECOMMENDATIONS FOR FURTHER STUDY

The following areas appear to be open for further study:

1. Several student articulation problems were mentioned in this study. It is suggested that further studies be conducted with emphasis upon one or more of the problems. For example, an in-depth study of student problems in adjusting to college life might reveal causes of first-year college drop-outs.

2. A study similar to the present one should be conducted to show student articulation problems between public high schools and private colleges and universities. A comparison could then be made of student articulation problems encountered with public and private colleges and universities.

3. Further studies should be conducted to reveal student articulation problems between junior colleges and senior colleges and universities.

4. It is recommended that research concerning all areas of high school-college articulation be continued. Only through persistant effort and cooperation can articulation problems be dealt with effectively.

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**BOOKLET FOR RECORDING CRITICAL INCIDENTS OF**

**HIGH SCHOOL COUNSELORS AND COLLEGE REPRESENTATIVES**

Personal

AGE: ___ SEX: ___M ___F RACE: _____

MARITAL STATUS: ___Married ___Single

HIGH SCHOOL GRADUATE: ___Yes ___No

HIGH SCHOOL SIZE (total students): ___below 115; ___115-225; ___226-449; ___450-1,019; ___1,020 or more

HIGH SCHOOL LOCATION: ___Northwest Texas (Lubbock, Amarillo area); ___Southwest Texas (Odessa, San Angelo, El Paso area); ___Northcentral Texas (Dallas, Ft. Worth, Wichita Falls area); ___Central Texas (Austin, Waco area); ___Southcentral Texas (San Antonio, Corpus Christi area); ___Rio Grande Valley; ___Northeast Texas (Tyler, Texarkana area); ___Southeast Texas (Lufkin, Houston area); ___Other.

**PURPOSE AND INSTRUCTIONS**

This booklet is designed to record information from college freshmen. It is anticipated that the data will be used by high school counselors and college representatives in advising students. Please read the instructions for writing the critical incidents that you have observed before completing the booklet. Please consider incidents involving your moving from the high school to college.

## Method

### The Critical Incident Technique

The Critical Incident Technique, developed at the American Institute of Research in Pittsburgh, Pa., involves the collection of representative samples of behavior which can be used as a basis for obtaining objective, quantitative data regarding an activity.

### Instructions for writing Critical Incidents

The following conditions should be satisfied in order that the incidents reported will be valid:

1. An accurate detailed description of especially effective or ineffective behavior in a specific situation.

2. Examples should be concrete. Please write down what counselors and college representatives did or said, keeping in mind that a critical incident is not average behavior.

3. Please do not mention any person's name. We are only interested in the description of incidents describing behavior.

In order to show more clearly the type of incident needed, four illustrations from other areas are reproduced below.

### EXAMPLES OF EFFECTIVE BEHAVIOR

1. "I was failing a course in history, due to missing two weeks of class because of illness. My teacher realized the difficulty I had and devoted extra time after school to help me catch up. I made a B on the last test and seem to be back in the groove again. To me this is superior teaching."

2. "I went to my doctor with a very bad backache. After examining me he said he could find nothing wrong, but advised me to have x-rays made. I told him that I didn't think I could afford the expense but he said he thought it was very important in my case and that I could take time to pay him for the x-rays. I told him to go ahead. The x-rays showed a problem that was cleared up later by medication. Without his insistence on the x-rays, I would have had serious trouble."

### EXAMPLES OF INEFFECTIVE INCIDENTS

3. "I went into a local shoe store last month to buy a pair of shoes. After looking for ten minutes, the clerk informed me that he was out of stock in my style and size. When he insisted I try another style, I very politely told him I would look for shoes in another store. He became quite irritated and told me that I was too particular. For that reason, I will not return to that store again."

4. "The instructor I have for math lectures for most of the class period. Even though we have a book for the course, he very seldom refers to it. The mid-semester exam was quite long and in standardized form, taken from the company that prints the book. A majority of the class made low grades due to this type of test. We were not informed as to how we should have studied. To me this is very ineffective teaching."

## CRITICAL INCIDENTS OF HIGH SCHOOL COUNSELORS

## AND COLLEGE REPRESENTATIVES

Incident 1

During the time you were preparing for college, your high school counselor may have helped you in making important decisions regarding college entrance.

Please write down an incident that you recall the high school counselor **did** or **said** which you considered especially **good**. Remember, we are not interested in routine behavior, but in a description of something outstanding which he has said or done.

Incident 2

Now, please write down an incident, with the high school counselor, that you can remember that seemed to you to be especially **bad**.

Incident 3

During the past several months (or years), a college representative (college night recruiter, admissions officer, financial aids officer, etc.) may have helped you in making decisions **before** or **after** you entered college.

Please write down an incident that you recall the college representative **did** or **said** which you considered especially **good**. Remember, we are not interested in routine behavior, but in a description of something outstanding which he has said or done.

Incident 4

Now, please write down an incident with a college representative, that you can remember, that seemed to you to be especially **bad**.

From the time you **first** considered attending college, to the present time, you perhaps encountered several problems in making this all important move.

Please record a **short description** of three major problems that you encountered in making this change from high school to college.

1.

2.

3.

Student Questionnaire

Purpose of the Study: The results of this questionnaire should help high school counselors and college representatives in their advisement of students entering college for the first time.

AGE:___17-18;___19-20;___21-22;___23 or above. MALE___ FEMALE___ RACE_____
Please indicate with a check mark the following information concerning the high school from where you graduated: HIGH SCHOOL ENROLLMENT: ___below 115; ___115-225; ___226-449; ___450-1019; ___1020 or more. HIGH SCHOOL LOCATION (in Texas):

___Northwest (Amarillo, Lubbock area)
___Southwest (Abilene, San Angelo, Odessa area)
___Far West (El Paso area)
___Rio Grande (Laredo, Brownsville area)
___Southcentral (San Antonio, Corpus Christi)
___Northcentral (Dallas, Ft. Worth, Wichita Falls area)
___Central (Austin, Waco area)
___Northeast (Tyler, Greenville, Paris Texarkana area)
___Southeast (Houston, Lufkin, Beaumont area)
___Other (out-of-state)

Instructions to Students:
The following ten statements are problems which YOU may have encountered in changing from your high school to the college or university you now attend. Please read each statement carefully and decide how YOU would rate the problem according to YOUR PARTICULAR SITUATION. Give YOUR most honest judgement by circling the number which best indicates the importance of the problem.

(circle one for each problem)

| Problems | Extremely Important | Very Important | Important | Less Important | Not Important |
|---|---|---|---|---|---|
| 1. Choosing a major field of study in college | 5 | 4 | 3 | 2 | 1 |
| 2. Adjusting to college life (social, dorm life, etc.) | 5 | 4 | 3 | 2 | 1 |
| 3. Admission to college (entrance requirements, information about college, registration, etc.) | 5 | 4 | 3 | 2 | 1 |
| 4. Study habits (budgeting time, etc.) | 5 | 4 | 3 | 2 | 1 |
| 5. Transportation (driving to school, lack of transportation, etc.) | 5 | 4 | 3 | 2 | 1 |
| 6. Choosing the right college to attend | 5 | 4 | 3 | 2 | 1 |
| 7. Adjusting to college teachers and college courses | 5 | 4 | 3 | 2 | 1 |
| 8. Accepting responsibility (self-confidence, being independent, making decision, etc.) | 5 | 4 | 3 | 2 | 1 |
| 9. Financing of college education | 5 | 4 | 3 | 2 | 1 |
| 10. Making new friends (leaving home and friends, etc.) | 5 | 4 | 3 | 2 | 1 |